WHAT IS CLAIMED IS:

1. A method for identifying an organism comprising the steps of:
1) preparing one kind or more of double-stranded DNA fragments by a random PCR using, as a template, at least a part of a genome of an organism which is to be identified,
2) subjecting said double-stranded DNA fragments prepared in step 1 to temperature gradient gel electrophoresis (TGGE) or denaturant gradient gel electrophoresis (DGGE),
3) extracting identification dots of each DNA fragment from an electrophoretic pattern which was obtained in step 2,
4) determining PaSS and/or genome semi-distance(s) from the identification dots which were obtained in step 3, and
5) analyzing the PaSS and/or genome semi-distance(s) which was/were obtained in step 4,
wherein in the electrophoresis by TGGE or DGGE, a standard DNA is co-existed as a standard point for the identification dots and the pseudo-absolute location of the identification dots is determined from the locational relation to the standard DNA.

2. A method according to claim 1, wherein said standard DNA has sequence ID No. 1 or 2 which is shown in the sequence listing.

3. A method according to claim 1 or 2, wherein said identification of an organism is the species identification or homology identification of an organism.

4. A method according to any of claims 1 to 3, wherein in step 1, a raw material labeled with a fluorescent marker is used for said random PCR to amplify DNA fragments with a fluorescent

marker and a fluorescence labeled DNA is used as the standard DNA, and in step 3, said extraction from the identification dots is carried out using a image processing using the fluorescent markers carried by the DNAs.

5. A method according to claim 4, wherein said raw material having the fluorescent marker is a primer or nucleotide.

6. A method according to any of claims 1 to 5, wherein the identification dots which are obtained in step 3 are expressed by the coordinates of the temperature axis and the mobility axis in the case of temperature gradient gel electrophoresis (TGGE), and by the coordinates of the denaturant concentration axis and the mobility axis in the case of denaturant gradient gel electrophoresis (DGGE).

7. A method according to any claims 1 to 6, wherein said organism is a microorganism.